REMARKS

Response to the §103 Rejections of Claims 1-4, 6-7, and 9-11

In the June 14, 2005 Office Action, the Examiner rejected claims 31, 34-38, and 40 under 35 USC §103(a) as allegedly obvious over U.S. Patent Application Publication No. 2002/0000242 to Matushiita et al. (hereinafter "Matushiita"), in view of U.S. Patent No. 6,100,166 to Sakaguchi et al. (hereinafter "Sakaguchi"), U.S. Patent No. 6,350,945 to Mizuno (hereinafter "Mizuno"), and U.S. Patent Application Publication No. 2003/0017712 to Brendel (hereinafter "Brendel").

In response, Applicants have hereby amended claim 31, from which claims 34-38 and 40 depend, to positively recite an integrated circuit comprising "a semiconductor layer including a continuous residual porous layer." Support for such claim amendment is provided in Figure 2J of the instant specification as filed, which shows a continuous residual porous layer 120".

None of the Matushiita, Sakaguchi, Mizuno, and Brendel references teaches or suggests the claimed structure now recited in the amended claim 31, i.e., an integrated circuit that comprises a semiconductor layer including a continuous residual porous layer.

As previously pointed out in the April 25, 2005 Response, the Matushiita, Sakaguchi, and Mizuno references do not even teach or suggest an integrated circuit structure having a residue porous layer, much less a continuous residual porous layer as recited by amended claim 31.

Brendel, which is a newly cited reference in the June 14, 2005 Office Action, discloses a device structure that contains a residual porous layer 18 that is non-

continuous, i.e., a layer-like structure that contains porous material in some regions but has no porous material in other regions (see Brendel, Figure 13F, and paragraph [0190]).

Further, Brendel teaches that the non-continuous nature of the residual porous layer 18 is essential for allowing partial crystallization of the amorphous layer 76 that is subsequently deposited over the non-continuous porous layer 18, i.e., the portion of layer 76 as deposited over those regions that contain the porous material can be crystallized, while the portion of layer 76 as deposited over those regions that do not contain the porous material remains amorphous (see Brendel, paragraph [0192]). A person ordinarily skilled in the art would not be motivated to modify the teachings of the Brendel reference for forming a continuous residual porous layer, since such modification would have rendered the device structure disclosed by Brendel inoperable for its intended purpose.

Therefore, Brendel does not provide any basis for an integrated circuit that contains a continuous residual porous layer, as positively recited by claims 31, 34-38, and 40 of the present application, and cannot remedy the deficiency of the Matushiita, Sakaguchi, and Mizuno references.

Based on the foregoing, Applicants respectfully request the Examiner to reconsider, and upon reconsideration to withdraw, the rejections of claims 31, 34-38, and 40 of the present application.

CONCLUSION

It is hereby submitted that claims 31, 34-38, and 40 as amended hereby are in condition for allowance. Issue of a Notice of Allowance for the application is therefore requested.

If any issues remain outstanding, incident to the formal allowance of the application, the Examiner is requested to contact the undersigned attorney at (516) 742-4343 to discuss same, in order that this application may be allowed and passed to issue at an early date.

Respectfully submitted,

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